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PLANNING BOARD GRAFTON, MA

April 19, 2019

Joseph Laydon Town Planner Grafton Municipal Center 30 Providence Road Grafton, MA 01519 Grafton Conservation Commission Grafton Municipal Center 30 Providence Road Grafton, MA 01519

RE: Response to Graves Engineering Peer Review Comments
The Grafton Public Library 35 Grafton Common

Dear Joseph and Conservation Commissioners:

CDW has reviewed the comments by Graves Engineering (GEI), we have provided this letter to provide a written response to the comments. GEI's original comments are shown in italics, and CDW responses are in bold.

- 1. Lot coverage calculations showing the percentage of buildings, percentage of pavement, and percentage of open space/landscaped need to be included in the plans. (§1.3.3.3.d.15). Plan Sheets C-100 and C-200, have been revised to show the percentages as requested.
- 2. Parking calculations need to be provided for the proposed use, (§1.3.3.3.d.16)
  Plan Sheet C-200, have been revised to show parking calculations in accordance with the Massachusetts Board of Library Commissioner requirements.
- 3. GEI has reviewed the Stormwater Management Plan and has no issues relative to compliance with the Grafton Stormwater Management Standards.

  No further comment required.
- GEI has no issues relative to compliance with the Grafton Wetland Regulations except as noted in the following two comments.
   No further comment required.
- 5. Stormwater Basin #1 and Stormwater Basin #2 are proposed with interior slopes of 2H:1V; the regulations require a maximum embankment slope of 3H: 1 V. Whereas the stormwater basins are depressions in the ground rather than built-up earthen embankments, GEI defers to the Conservation Commission whether the proposed 2H: 1 V slopes are acceptable. (§1.v.B.5.h.(i)) The 2:1 side slope was proposed to make walking across the basin as uninviting as possible, due to the concerns raised during the initial site planning process of people parking at the library possibly taking a shortcut across the basin and railroad tracks, to get to the nearby Cumberland Farms. Based on the discussion of the side slopes at the



Conservation Commission hearing on 4/16/19 we have revised the basins to provide a 3:1 side slope.

- 6. At Stormwater Basin #2, the level spreader elevation (482.80 feet in the hydrology calculations) needs to be labeled. Based upon a nearby existing spot elevation of 483.4 feet, some minor grading may occur within the 25-foot wetland buffer. (§1.V.C.5.a)

  The level spreader elevation has been revised to 483.5 and labeled on the plans. The side slopes have been adjusted per #5 above. Additionally, per MassDEP comments, the grass and gravel strip has been removed and replaced with a sediment forebay area.
- 7. GEI reviewed the hydrology computations and found them to be in order except as noted in the following comment.

No further comment required.

- 8. The orifice size for CB2 (OCS) is inconsistent between the HydroCAD computations and the construction detail provided on Sheet C501. The information needs to be consistent.

  The detail has been revised to consistently show a 6x17 inch opening.
- 9. Compliance with MassDEP Stormwater Handbook is reasonable.

  No further comment required.
- 10. The title blocks of Sheets C100 through C400 indicate that the scale is 1"=20', however the scale bar and measured dimensions on the sheets are at a scale of approximately 1"=25.3'. The plotted scale on these plan sheets needs to be re-checked.
  The plan sheets are set up on an architectural 30"x42" border, at a 1" = 20' scale. The approximate scale of 1" = 25' is due to the plans being plotted to a 24" x 36" sheet.
- 11. On Sheet C100, the lines for the erosion control barriers needs to be labeled or identified in the legend.

A label has been added.

- 12. The existing conditions plan does not reflect the curb-line improvements at the intersection of Upton Street and South Street that were made in 2017. Nevertheless, the 2017 curbline improvements don't have a negative impact on the proposed project.
  That portion of the site was originally surveyed by CDW in fall of 2016, no further
  - That portion of the site was originally surveyed by CDW in fall of 2016, no further comment required.
- 13. GEI performed a cursory review of the traffic memorandum. GEI has no issues with information presented in the memorandum.

  No further comment required.
- 14. The two HC ramps southwest of the building will have grades of approximately 7.8%. Per the Massachusetts Architectural Access Board regulations, the ramps will need to have handrails. Handrails were not shown on Sheet C200.



A waiver is before the Conservations Commission to allow the construction of a walkway within the 25-ft wetland buffer. This walkway is shown to the left of the HC ramps as a dashed line on Sheet C-200. This is the preferred walkway configuration. Should the Conservation Commission approve the waiver, the walkway extending out to the front common area will be removed, eliminating the need for the both HC ramps as shown. The grade of circular brick paver area will be lowered, and no HC ramp will be necessary. If the waiver is not granted, the dashed walkway will be removed, and a HC ramp detail with railings will be provided.

15. GEI did not review the architectural plans.

No further comment required.

Revised plans and are attached to this letter. Please let me know if you have any other questions.

Very truly yours,

CDW CONSULTANTS, INC.

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Eric Wilhelmsen, PE Associate Principal